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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,308	04/09/2004	Yvone Manz	5454-6	9698
27799	7590	10/17/2005	EXAMINER	
COHEN, PONTANI, LIEBERMAN & PAVANE 551 FIFTH AVENUE SUITE 1210 NEW YORK, NY 10176			LE, THAO X	
			ART UNIT	PAPER NUMBER
			2814	

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/821,308

Applicant(s)

MANZ ET AL.

Examiner

Thao X. Le

Art Unit

2814

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 08/19/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6690087 to Kobayashi et al.

Regarding claim 1, Kobayashi discloses a power semiconductor module for mounting on a flat body in fig. 8a comprising a plurality of partial modules 8, each of said partial modules 8 having: a base plate 1, fig. 5b, a frame-like housing 2, fig. 6a, terminal elements 3 and 4 for load terminals and auxiliary terminals, at least one electrically insulated substrate 8, fig. 6b, disposed inside said housing 2 on said base plate 1, said substrate 8 having an insulation body with a plurality of metal tracks 8b/c, column 6 line 32, located therein and insulated from one another, fig. 4, and power semiconductor components 9, located on said connection tracks 8 and electrically connected thereto, fig. 5b, and means for connecting adjacent partial modules to one another, fig. 8a col. 2 lines 1-5 and col. 7 line 30-52.

Regarding claim 2, Kobayashi discloses the power semiconductor module wherein said means for connecting a cap (lid), col. 1 line 4.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 3-4, 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6690087 to Kobayashi et al. in view of US 2002/0153532 to Sonobe et al.

Regarding claims 3, 6-8, and 10, Kobayashi does not disclose the power semiconductor module wherein said cap is connected to said partial modules by means of snap-detent connections, said housing has detent lugs, and said cap has abutments formed to cooperate with said detent lugs, wherein said means for connecting

comprises fixing connections including a rail that cover all recesses and slots formed thereby in adjacent partial modules.

However, Sonobe discloses the power semiconductor module in fig. 25-27 wherein cap 14b [0072] is connected to said partial modules by means of snap-detent connections, fig. 27, housing 6b [0072] has detent lugs 31, and cap has abutments 32 formed to cooperate with said detent lugs 31, wherein said means for connecting comprises fixing connections, including a rail 31 and 34 that cover all recesses and slots formed thereby in adjacent partial modules. At the time the invention was made; it would have been obvious to one of ordinary skill in the art to use the snap fit connection teaching of Sonobe with Kobayashi's device, because it would have provided a easy fit assembly as taught by Sonobe in [0072].

Regarding claims 4, 9, Kobayashi discloses each partial module 8 has at least two open-slot like recesses on a side thereof, and positioned so that, when said partial modules are assembled into a power semiconductor module, said recesses in sides of adjacent partial modules face one another to form closed slots, fig. 8a.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6690087 to Kobayashi US 2002/0153532 to Sonobe et al. as applied to claims 4-5 above and further in view of US 6802745 to Loddenkoetter.

Regarding claim 5, Kobayashi discloses the power semiconductor module of claim 4, wherein said cap has round slot like recesses, which in the abutting region of said partial modules, are aligned with said recesses that form said slots therein.

But Kobayashi does not disclose the closed slot recesses for receiving screws. At the time the invention was made; it would have been obvious to one of ordinary skill in the art to use screws with 'Kobayashi's device, because such connection is typical in the art for connecting the adjacent housing areas as disclosed by Loddenkoetter in col. 1 line 20-25.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao X. Le whose telephone number is (571) 272-1708. The examiner can normally be reached on M-F from 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael M. Fahmy can be reached on (571) 272 -1705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/821,308
Art Unit: 2814

Page 6

Thao X. Le
07 Oct. 2005

A handwritten signature in black ink, consisting of several overlapping horizontal and diagonal strokes, located below the printed name and date.